

Art Rejections

Claims 1-3 and 5-19 are rejected as obvious over Blair in view of Parrott.

Blair is an older patent, in which the “gun” that hold the charges is a flat strip. However, the charges of Blair are not simply held in place by the strip gun. Rather, as Blair points out, to

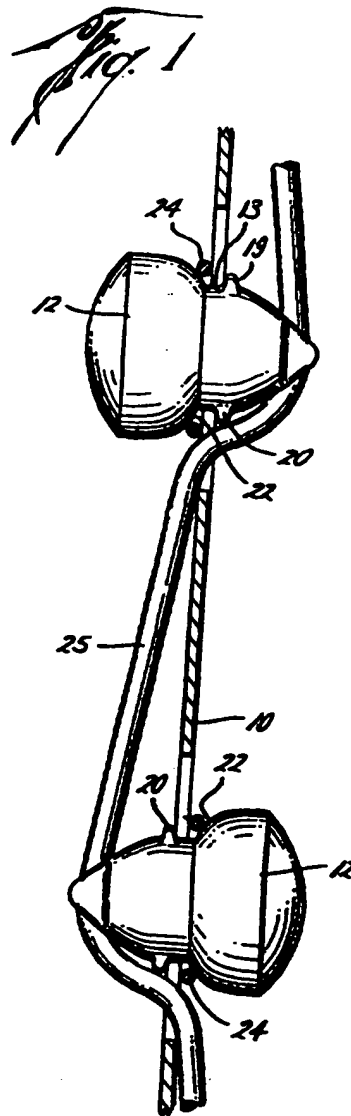
“fix the container [i.e., charge] relative to the strip member 10, an annular, resilient ring 24 is disposed between the annular shoulder 22 on the container and the strip member ... The ring 24 is thus stretched to pass over the enlarged cross section of the forward end of the container and thereafter wedges between the shoulder 22 and one side of the strip to snugly hold the lugs 19 and 20 to the other side of the strip or secure the container 12 against movement relative to the strip member.”¹

The resilient ring 24 mentioned above is only seen in cross-section in Blair’s Figure 1 to the right, but given the loose fit between the charge 12 and the carrier strip 10, it is obvious that resilient ring 24 is necessary to keep the charge from coming loose.

Parrott, on the other hand, notes that

“it is a primary object of the present invention to provide a method and apparatus for securing a shaped charge to a loading tube of a perforating gun without using a separate charge retention apparatus, such as a retaining ring or a charge retention jacket or a clip or a bending tab, to secure the shaped charge to the loading tube.”²

Given that a primary objective of Parrott is to get away from the use of a retention apparatus, it is respectfully submitted that one of ordinary skill in the art would not seek to combine Parrott with Blair, or with any other device that used a separate retention apparatus. Rather, one of ordinary skill in the art would recognize that Parrott specifically teaches away



¹ Blair, col.2, lines 46-58

² Parrott, col.1, 1st paragraph of Summary of the Invention, underlining added

from such prior work as Blair. Thus, with no proper motive to combine these references, this rejection is overcome.

Additionally, the Examiner is thanked for her use of figures from Blair in her office action, as these help communications. It is noted, however, that the labeling in the office action of Figure 2 of Blair is somewhat misleading. The Examiner's drawing, reproduced below on the left, has been labeled to show four tabs on the strip. Blair, in discussing this patent's Figure 2, below on the right, notes that "the lugs 19 and 20 on a container 12 are passed through a pair of slots 14 and 15 in the strip ... [then] container 12 is easily rotated"³. The Examiner has apparently misread both the lugs 19 and 20 and the slots 14 and 15 as slots. Given that there are only two slots in the strip, each "tab" would extend around approximately 160° of the circumference of the opening. It is submitted that this would not generally be considered a "tab" by one of ordinary skill in the art.

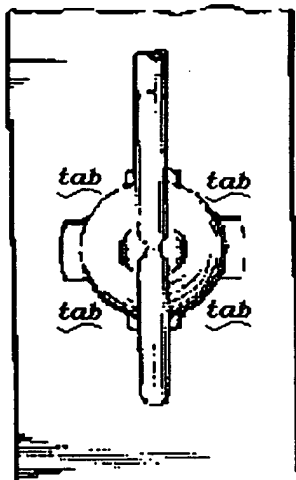
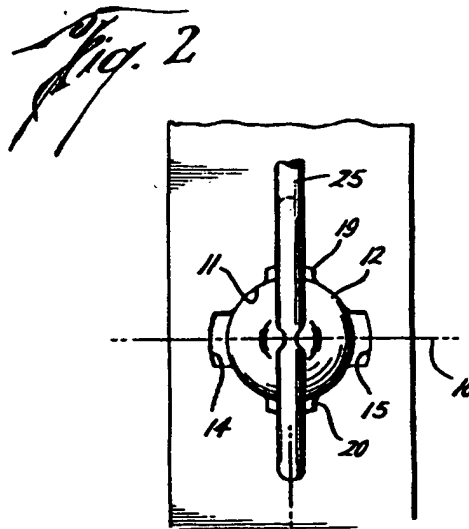


FIGURE 2

Examiner's drawing



Blair's drawing

³ Blair, col.3, l.33-46, underlining added

CONCLUSION

It is respectfully urged that the subject application is patentable over references cited by Examiner and is now in condition for allowance. Applicant requests reconsideration of the application and allowance of the claims. If there are any outstanding issues that the Examiner feels may be resolved by way of a telephone conference, the Examiner is cordially invited to contact David W. Carstens at 972.367.2001.

The Commissioner is hereby authorized to charge any additional payments that may be due for additional claims to Deposit Account 50-0392.

Respectfully submitted,

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